

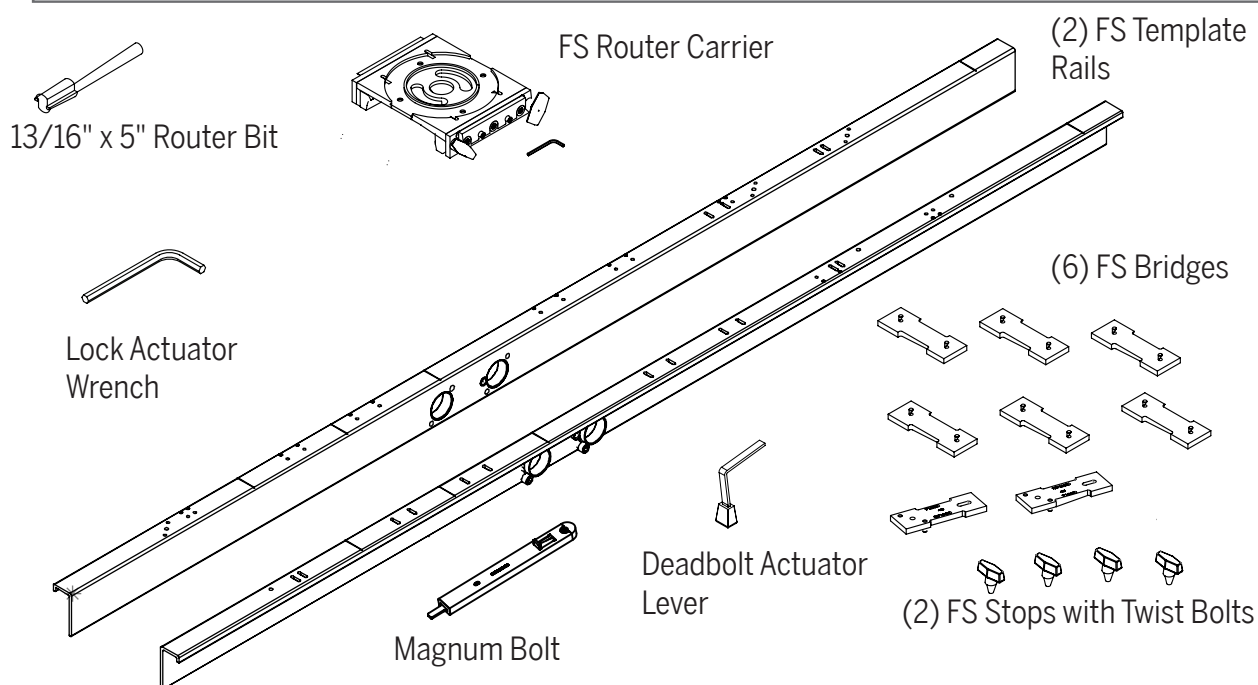
TRILENNIUM FULL SCOPE (FS) TEMPLATE INSTRUCTIONS

Overview

Parts Included in Template System:

- Full Scope (FS) Template Rails, with \varnothing 2-1/8" Crossbore Guides.
- FS Router Carrier (for 1-3/4", 2" & 2-1/4" Doors)
- FS Bridges, Stops and Twist Bolts
- 13/16" x 5" Router Bit
- 9" Magnum Bolt
- Deadbolt Actuator Wrench
- Lock Actuator Wrench
- Instructional Video on USB Drive

All parts above available in Endura Item #: TC-TEMP-FSM-COMPLTE

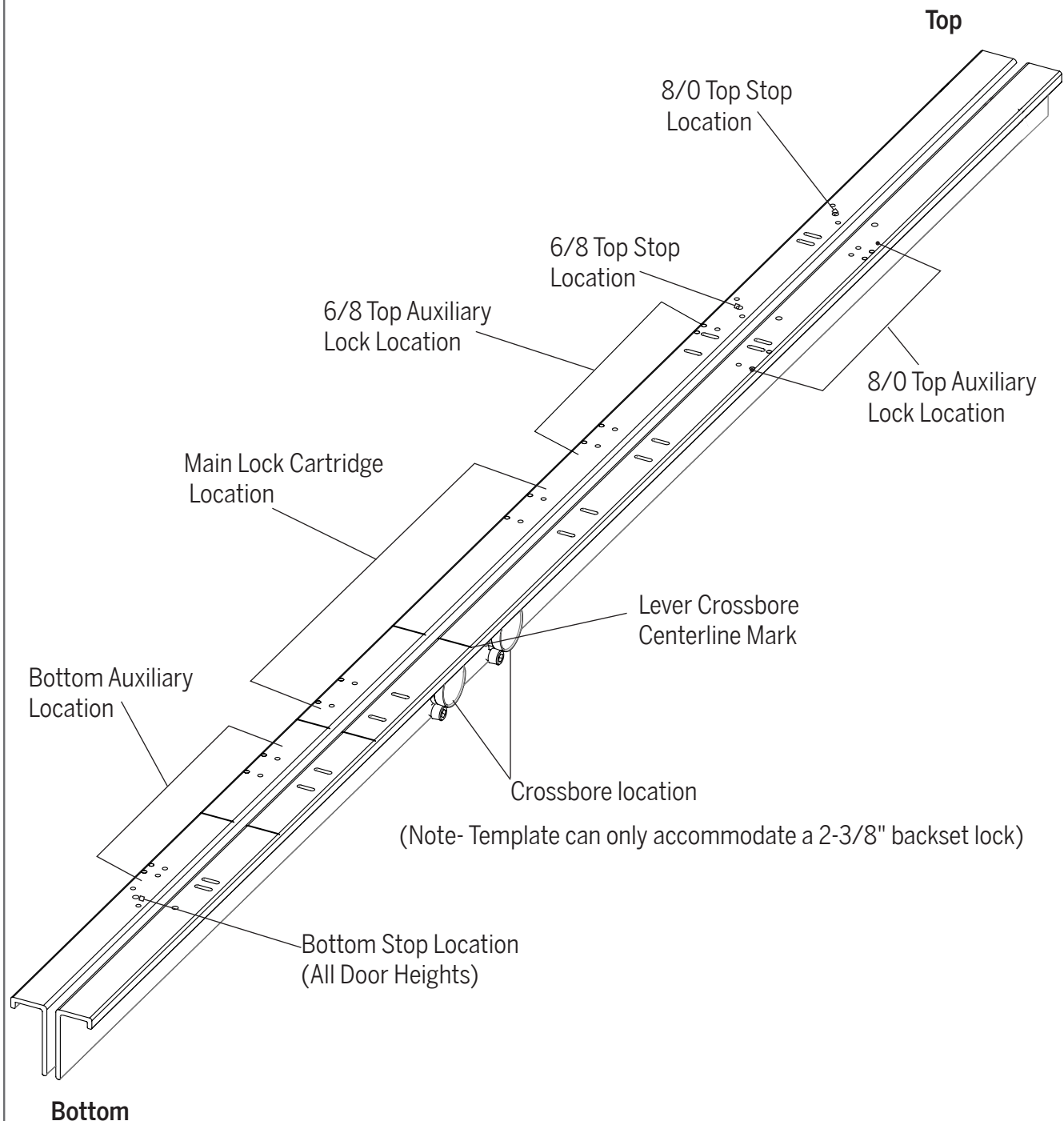


Additional Parts Required:

- Milwaukee® 5616-24 Router
- 1"x 2-1/2" Router Bit for 3000 Series Installation
- 57/64" x 2-1/2" Router Bit for 3070 Series Installation. (Endura Item# TC-TEMP-RTBIT-088)
- 1/2" Drill Bit
- #9 VIX- Drill Bit
- Optional- \varnothing 1-11/16" Crossbore Guides (Endura Item# TC-TEMP-BUSHING168)

TRILENNIUM FULL SCOPE (FS) TEMPLATE INSTRUCTIONS

Overview: Full Scope (FS) Template Rails





TRILENNIUM®
MULTI-POINT LOCKING SYSTEMS

TRILENNIUM FULL SCOPE (FS) TEMPLATE INSTRUCTIONS

WARNING:

1. Using power tools can be dangerous. Only trained personnel should operate power tools.
2. Follow all instructions provided by the equipment manufacturer.
3. Do not change or adjust router or drill bits while equipment is plugged in.
4. Proper personal protection devices, including but not limited to safety glasses and ear plugs, should be worn at all times while operating power tools.

TRILENNIUM FULL SCOPE (FS) TEMPLATE INSTRUCTIONS

1. Position Template on Door Panel

- A.** Mount/and or stabilize the door with hinge edge facing downward.



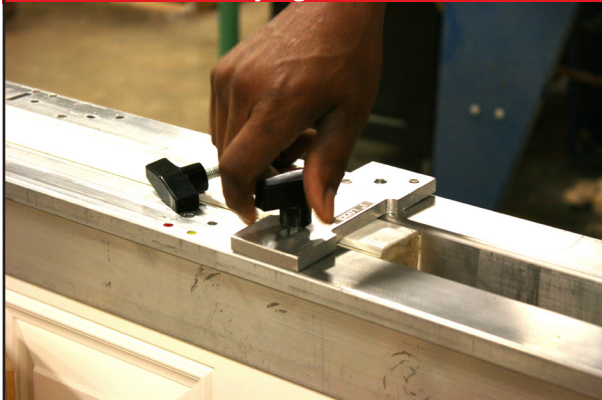
- B.** Mark lever crossbore centerline position.



- C.** Place template on stile edge.



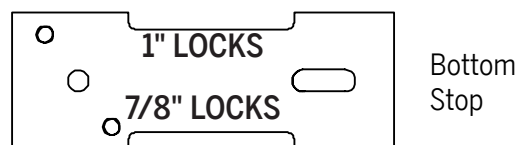
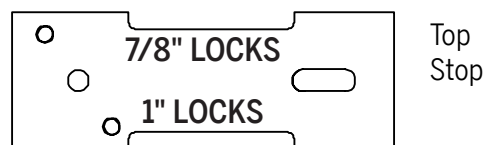
- D.** Install stops in position according to door size. Do not fully tighten.



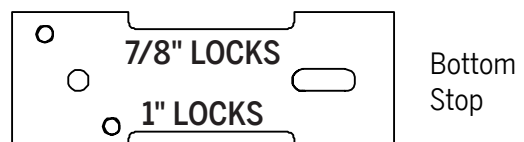
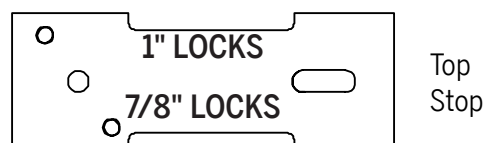
See Diagram to the right.

ORIENTATION OF STOPS

For 3000 Locks (1" locks)



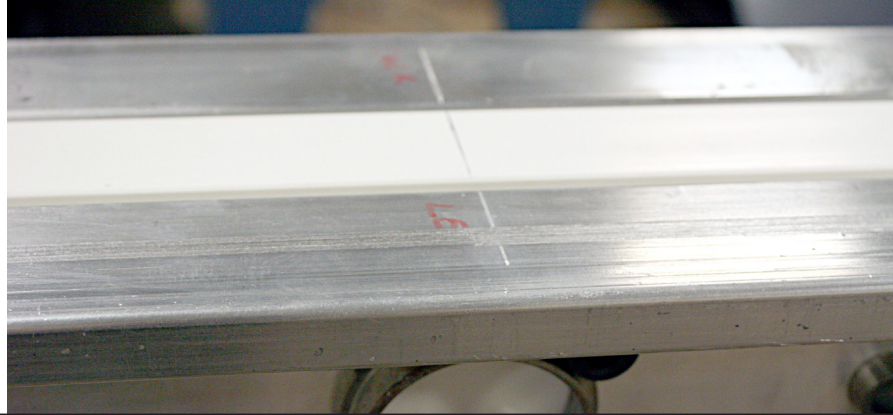
For 3070 Locks (7/8" Locks)



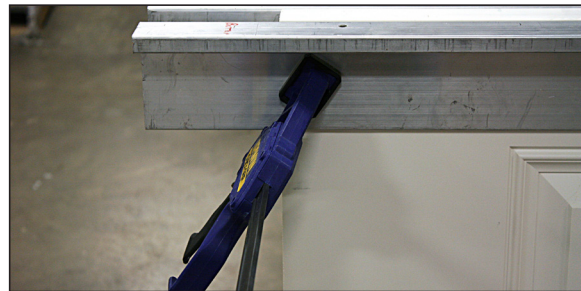
TRILENNIUM FULL SCOPE (FS) TEMPLATE INSTRUCTIONS

1. Position Template on Door Panel (cont.)

- E. Align template lever crossbore mark with panel crossbore center. Squeeze rails tightly against panel. Tighten rails against door by securing twist bolts.



- F. Secure template rails with clamps at each end to ensure that the template does not move during fabrication

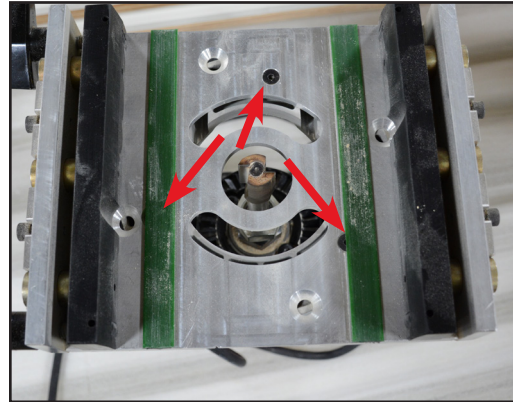


TRILENNIUM FULL SCOPE (FS) TEMPLATE INSTRUCTIONS

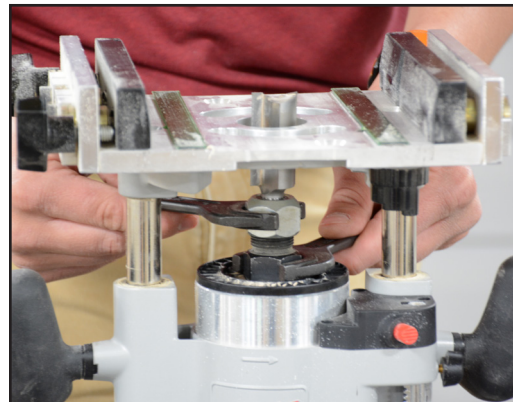
2. Router Set-Up

A. Install the Router Carrier onto the Router.

- i. Use the three screw locations, indicated with the arrows, to attach the carrier to the router.
- ii. Once the carrier is fastened, remove the backing on the green "glides" and install them onto the carrier as shown.



B. Insert the **1" x 2-1/2"** router bit into the router for 3000 Series Installation (or a **57/64" x 2-1/2"** Router Bit for 3070 Series Installation)



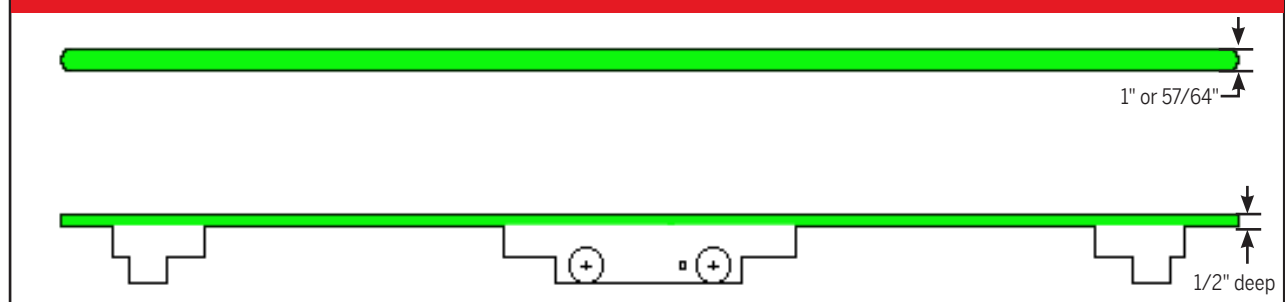
C. Set the router depth at 1/2" using the thickness of the Magnum Bolt



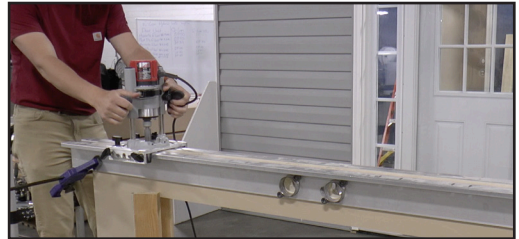
TRILENNIUM FULL SCOPE (FS) TEMPLATE INSTRUCTIONS

3. Routing for Lock Channel - 1/2" Deep Cut

Green Position Routing locations for 3000/3070 Locks



A. Place the router onto the rails



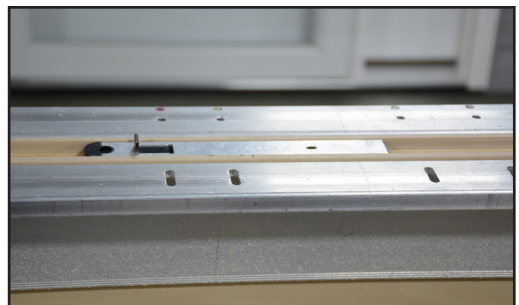
B. Route the faceplate slot by traveling the entire distance between the stops to create the 1/2" pocket.

⚠ Recommendation: Route several passes of increasing depth to obtain a smoother cut.

⚠ Caution: Remove sawdust near the end stops to ensure the router travels the full distance.



C. Clean out the routed pocket and check the 1/2" depth using the Magnum Bolt or place the lock face down into the routed channel.

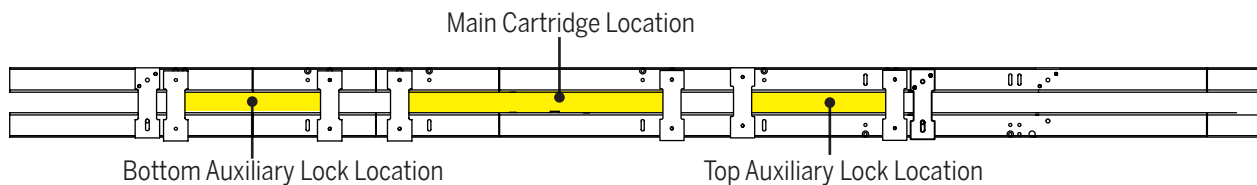


TRILENNIUM FULL SCOPE (FS) TEMPLATE INSTRUCTIONS

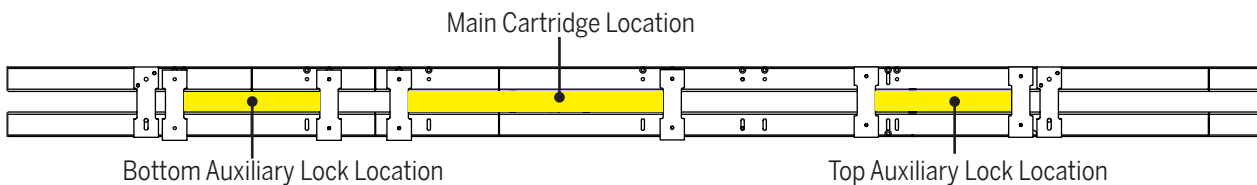
4. Routing for Main and Auxiliary Locks - 2" Deep Cut

Yellow Position Routing locations for 3000/3070 Locks

NOTE: Bridge Stops for "outer" locations **not** used for 3500/3020 (See #5B-2).



*6/8 configuration shown.



*8/0 configuration shown.

A. Remove the 1" x 2-1/2" Router Bit (or 5/8" x 2-1/2" Router Bit) from the router and install the **13/16" x 5" Router Bit**.

- i. Mark the router bit at 3-3/8" from the tip of the bit
- ii. Insert the bit into the collet until this mark just shows and tighten it down.
- iii. Extend the plunger to its deepest depth and check that you have slightly over 3-1/4"
- iv. Set the depth stop.
- v. Slide the depth gauge to an even number to simplify the calculation
- vi. Move the plunge up 1-1/4" (so you're at 2" depth)
- vii. Set the depth stop.
- viii. Withdraw the plunge all the way and check that the bit doesn't extend more than 1/2" (the bit will hang down into the 1" diameter cut when you start)



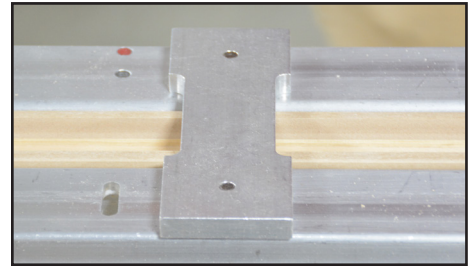
Recommendation: Create a 'cheat block' to test 3-1/4" depth of router and use the edge of a stop to check the 2" depth of router.

TRILENNIUM FULL SCOPE (FS) TEMPLATE INSTRUCTIONS

4. Routing for Main and Auxiliary Locks - 2" Deep Cut (cont.)

B-1. FOR 3000/3070 LOCKS

- Add the (6) FS bridges to the rails by inserting them at the yellow dots. This will help to mark the correct locations for the 2" routed pockets.



B-2. FOR 3500/3020 LOCKS

- Install (2) FS bridges to the rails that correspond to the location of the center mortise box.
- Install (1) FS bridge to the rail on the centermost yellow dot near the upper auxiliary module.
- Install (1) FS bridge to the rail on the centermost yellow dot near the lower auxiliary module.
- The end of each stop will be 17-1/4" from where the FS bridge was installed. You will need to mark these on the template.

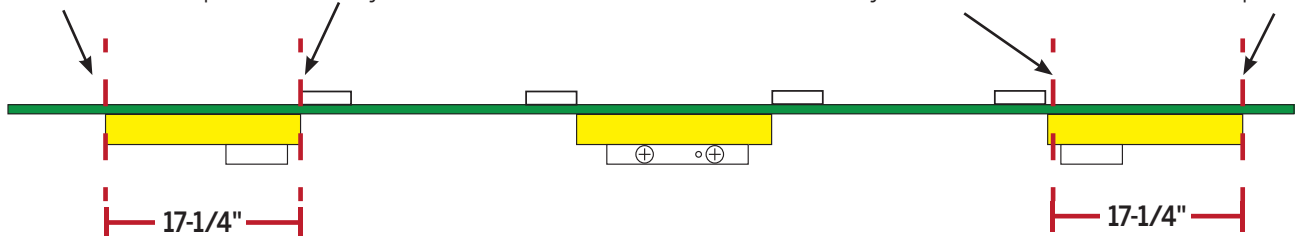
Yellow Position Routing locations for 3500/3020 Locks

For the **outer** location, measure 17-1/4" from the FS Bridge and mark the location on the template.

For the **inner** location, position the FS bridge at the yellow dot.

For the **inner** location, position the FS bridge at the yellow dot.

For the **outer** location, measure 17-1/4" from the FS Bridge and mark the location on the template.



C. Route the three pockets between the stops at the 2" depth.

Recommendation: Route several passes of increasing depth to obtain a smoother cut.

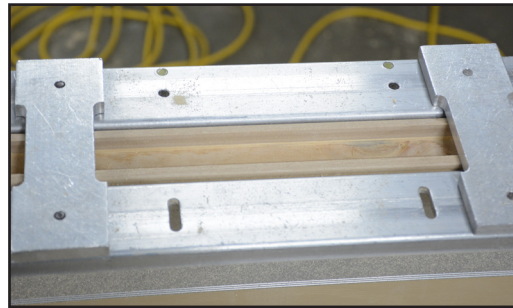
Caution: Remove sawdust near the end stops to ensure the router travels the full distance.



TRILENNIUM FULL SCOPE (FS) TEMPLATE INSTRUCTIONS

5. Routing for Main and Auxiliary Locks - 3-1/4" Deep Cut

A. Adjust the FS bridges to align with the red dots on the rails. This will help to mark the correct locations for the 3-1/4" routed pockets.



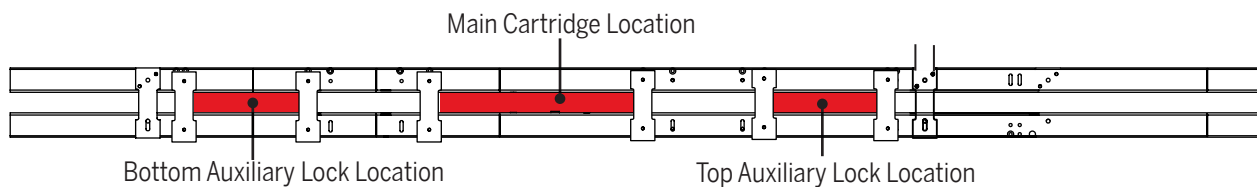
B. Adjust the depth setting on the router to be 3-1/4".



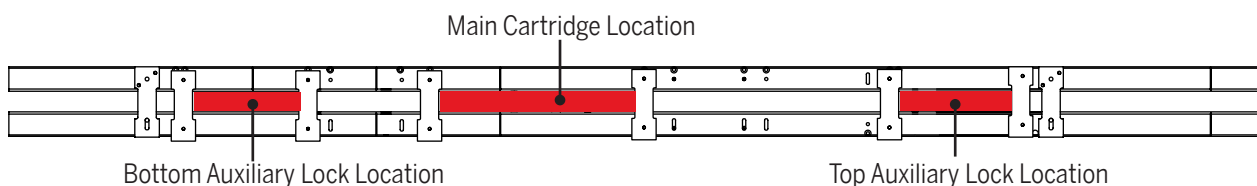
C. Route the 3 pockets between the stops to the depth of 3-1/4".



Red Position Routing locations - for 3000/3070/3500 Locks



*6/8 configuration shown.



*8/0 configuration shown.

TRILENNIUM FULL SCOPE (FS) TEMPLATE INSTRUCTIONS

NOTE: Routing Upper Auxiliary lock for 9/0 and 10/0 Panels (3000/3070/3500 Locks)

To route for 9/0 and 10/0 doors, the main center lock (3000, 3020, 3070 and 3500) and lower auxiliary lock (3000, 3070, 3500) will be fabricated as explained above. For the upper auxiliary lock:

- Slide the template up along the door panel so the crossbore centerline now aligns with the next set of score marks on the rail (approximately 10" below original score mark for the 9/0 door and approximately 20" below for 10/0 doors).
- Complete the 1- 1/2" deep route (Green).
- Create the 2" deep cut between the yellow stops. (Follow adjustments for the upper lock for 3500/3070 as described in Step 4.)
- Create the 3-1/4" deep cut between the red stops. (Follow adjustments for the upper lock for 3500/3070 as described in Step 5.)

TRILENNIUM FULL SCOPE (FS) TEMPLATE INSTRUCTIONS

6. Drilling the Crossbore and Mounting Screw Holes

A. Determine Crossbore size according to handle set style

- Use Ø1-11/16" or Ø2-1/8" crossbore for Eclipse, Pinnacle, Rectangular, Curved, Eclipse Grip, and Rocky Mountain Hardware.
- Use **ONLY** Ø1-11/16" crossbore for Horizon and Emtek.

B. Drill (2) Crossbores



Note:

Be sure to **ONLY** drill halfway through panel then drill the remaining half from opposite side. This will ensure a smooth cut out without splinters.



C. Drill ½" mounting screw hole



Note:

Be sure to **ONLY** drill halfway through panel then drill the remaining half from opposite side. This will ensure a smooth cut out without splinters.

Drilled Crossbore example:



TRILENNIUM FULL SCOPE (FS) TEMPLATE INSTRUCTIONS

7. Install Lock

A. Check completed fabrication with lock



- Clean out all debris from routed channels and pockets.
- Place lock face up into routed channel.
- Ensure lock faceplate is flush with the panel stile.

B. Drive screws into lock Faceplate.



1. Pilot drill mounting screw holes with #9 Vix-Bit
2. Install #10x1-1/2" mounting screws
 - (6) for 6/8 lock
 - (7) for 8/0 lock
3. Ensure screw heads are flush with the lock faceplate.

Caution

Do not over tighten screws.

TRILENNIUM FULL SCOPE (FS) TEMPLATE INSTRUCTIONS

8. Final Check

Check Deadbolt and Latch Functions.

Using the Deadbolt Actuator Lever and Lock Actuator Wrench, verify Lock and Handle Operation

1. Insert Lock Actuator Wrench into interior actuator hub and rotate it downward to withdraw the latches. All three latches should withdraw into the edge of the door completely. Release Lock Actuator Wrench, and ensure the latches return to their original position (approximately ½" projection).
2. Insert Lock Actuator Wrench into exterior actuator hub and rotate it downward to withdraw the latches. All three latches should withdraw into the edge of the door completely. Release Lock Actuator Wrench, and ensure the latches return to their original position (approximately ½" projection).
3. Insert Deadbolt Actuator wrench into deadbolt thumb-turn slot and operate 90°. Latch bolts should extend into dead-bolted position and be about 1" long. Push on the end of the three bolts to ensure that they remain extended.

Note

If you push on the end of the activated deadbolts and they can be depressed, or the exterior lever will open the door, the system is not locked. If either of these occur, remove the lock from the edge of the door and repeat steps #1, #2 and #3 with the lock out of the door. If it still does not lock and any of the deadbolt can be depressed, the lock will need to be replaced. If it locks properly outside the door, but not when installed, the cause is typically a fabrication issue from:

- i. not enough clearance allowed for the drive bars to move 1" vertically,
- ii. sawdust left in the fabrication,
- iii. pockets off-center twisting the lock mechanism to the side

4. Insert Lock Actuator Wrench into exterior actuator hub and Operate door. The exterior actuator hub should not turn, and latch bolts should remain in dead-bolted position.
5. Insert Lock Actuator Wrench into interior actuator hub and rotate downward, the Lever actuator hub should turn and the latch bolts should fully retract (Panic Release).